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Work Order #: M108006, 12H0252
ZWA

CLIENT: BRISTOL			INVOICE TO: BRISTOL			TURNAROUND REQUEST in Business Days*										
REPORT TO: ANNE KRANAWETTER						Organic & Inorganic Analyses										
ADDRESS: AMCHITKA, AK						10	7	5	4	3	2	1	<1			
PHONE: 907-770-0974 FAX: 770-0975			P.O. NUMBER: 21090			STD. Petroleum Hydrocarbon Analyses										
PROJECT NAME: AMCHITKA			REQUESTED ANALYSES			5	4	3	2	1	<1	STD. Please Specify				
PROJECT NUMBER: 21090						OTHER										
SAMPLED BY: AR & LCRM						*Turnaround Requests less than standard may incur Rush Charges.										
CLIENT SAMPLE IDENTIFICATION		SAMPLING DATE/TIME	metals	PCRS									MATRIX (W, S, O)	# OF CONT.	COMMENTS	NCA WO ID
1. OIAMLA32SL		8/3/01 1435	X	X									S	2		
2. OIAMLA27SL		8/3/01 1440	X	X									S	2		
3. OIAMLA21SL		8/3/01 1455	X	X									S	2		
4. OIAMLA22SL		8/3/01 1500	X	X									S	2		
5. OIAMLA09SL		8/3/01 1510	X	X									S	2		
6. OIAMLA04SL		8/3/01 1520	X	X									S	2		
7. OIAMLA05SL		8/3/01 1530	X	X									S	2		
8.																
9.																
10.																
11.																
12.																
13.																
14.																
15.																
RELINQUISHED BY: Anne Kranawetter			DATE: 8/3/01			RECEIVED BY: Craig Brudle			DATE: 8/3/01							
PRINT NAME: Anne Kranawetter			FIRM: BRISTOL			PRINT NAME: Craig Brudle			FIRM: NCA							
RELINQUISHED BY:			DATE:			RECEIVED BY:			DATE:							
PRINT NAME:			FIRM:			PRINT NAME:			FIRM:							
ADDITIONAL REMARKS:			TIME:			TIME:			TIME:							
COC REV 3/99			Last of North Lagoon's Confirmation Soil sediment samples			TEMP: 9.6			PAGE 1 OF 1							



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223
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7 December, 2001

Anne Kranawetter
Bristol Environmental & Engineering
2000 W International Airport C#1
Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are the results of analyses for samples received by the laboratory on 08/03/01 16:46. If you have any questions concerning this report, please feel free to contact me.

This report was recreated from a previously issued final report in order to provide an electronic copy. The final report used for these electronic copies may have been previously issued as an amended report due to client requested changes to sample names, etc. No data has changed since submission of the previously issued final, or amended, report.

Sincerely,

Stephen Wilson
Environmental Group Leader

Work Orders included in this report:

M108006



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Bristol Environmental & Engineering
2000 W International Airport C#1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
08/13/01 17:51

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AMLA32SL	M108006-01	Soil	08/03/01 14:35	08/03/01 16:46
01AMLA27SL	M108006-02	Soil	08/03/01 14:40	08/03/01 16:46
01AMLA21SL	M108006-03	Soil	08/03/01 14:55	08/03/01 16:46
01AMLA22SL	M108006-04	Soil	08/03/01 15:00	08/03/01 16:46
01AMLA09SL	M108006-05	Soil	08/03/01 15:10	08/03/01 16:46
01AMLA04SL	M108006-06	Soil	08/03/01 15:20	08/03/01 16:46
01AMLA05SL	M108006-07	Soil	08/03/01 15:30	08/03/01 16:46

C. O. C. # 216

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

North Creek Analytical, Inc.
Environmental Laboratory Network

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Bristol Environmental & Engineering
2000 W International Airport C#1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
08/13/01 17:51

Polychlorinated Biphenyls per EPA Method 8082
North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMLA32SL (M108006-01) Soil					Sampled: 08/03/01 Received: 08/03/01				
Aroclor 1016	ND	147	ug/kg dry	1	EPA 8082	08/03/01	08/04/01	0108009	
Aroclor 1221	ND	294	"	"	"	"	"	"	
Aroclor 1232	ND	147	"	"	"	"	"	"	
Aroclor 1242	ND	147	"	"	"	"	"	"	
Aroclor 1248	ND	147	"	"	"	"	"	"	
Aroclor 1254	ND	147	"	"	"	"	"	"	
Aroclor 1260	ND	147	"	"	"	"	"	"	
Surr: 2,4,5,6-Tetrachloro-m-xylene	134 %	55-130							S-07
Surr: Decachlorobiphenyl	105 %	55-130							
01AMLA27SL (M108006-02) Soil					Sampled: 08/03/01 Received: 08/03/01				
Aroclor 1016	ND	145	ug/kg dry	1	EPA 8082	08/03/01	08/04/01	0108009	
Aroclor 1221	ND	290	"	"	"	"	"	"	
Aroclor 1232	ND	145	"	"	"	"	"	"	
Aroclor 1242	ND	145	"	"	"	"	"	"	
Aroclor 1248	ND	145	"	"	"	"	"	"	
Aroclor 1254	ND	145	"	"	"	"	"	"	
Aroclor 1260	ND	145	"	"	"	"	"	"	
Surr: 2,4,5,6-Tetrachloro-m-xylene	131 %	55-130							S-07
Surr: Decachlorobiphenyl	105 %	55-130							
01AMLA21SL (M108006-03) Soil					Sampled: 08/03/01 Received: 08/03/01				
Aroclor 1016	ND	148	ug/kg dry	1	EPA 8082	08/03/01	08/04/01	0108009	
Aroclor 1221	ND	296	"	"	"	"	"	"	
Aroclor 1232	ND	148	"	"	"	"	"	"	
Aroclor 1242	ND	148	"	"	"	"	"	"	
Aroclor 1248	ND	148	"	"	"	"	"	"	
Aroclor 1254	ND	148	"	"	"	"	"	"	
Aroclor 1260	ND	148	"	"	"	"	"	"	
Surr: 2,4,5,6-Tetrachloro-m-xylene	132 %	55-130							S-07
Surr: Decachlorobiphenyl	101 %	55-130							

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

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Environmental Laboratory Network

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Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
08/13/01 17:51

Polychlorinated Biphenyls per EPA Method 8082
North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
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01AMLA22SL (M108006-04) Soil

Sampled: 08/03/01 Received: 08/03/01

Aroclor 1016	ND	146	ug/kg dry	1	EPA 8082	08/03/01	08/04/01	0108009	
Aroclor 1221	ND	292	"	"	"	"	"	"	
Aroclor 1232	ND	146	"	"	"	"	"	"	
Aroclor 1242	ND	146	"	"	"	"	"	"	
Aroclor 1248	ND	146	"	"	"	"	"	"	
Aroclor 1254	ND	146	"	"	"	"	"	"	
Aroclor 1260	ND	146	"	"	"	"	"	"	

Surr: 2,4,5,6-Tetrachloro-m-xylene 125 % 55-130

Surr: Decachlorobiphenyl 96.1 % 55-130

01AMLA09SL (M108006-05) Soil

Sampled: 08/03/01 Received: 08/03/01

Aroclor 1016	ND	147	ug/kg dry	1	EPA 8082	08/03/01	08/04/01	0108009	
Aroclor 1221	ND	294	"	"	"	"	"	"	
Aroclor 1232	ND	147	"	"	"	"	"	"	
Aroclor 1242	ND	147	"	"	"	"	"	"	
Aroclor 1248	ND	147	"	"	"	"	"	"	
Aroclor 1254	ND	147	"	"	"	"	"	"	
Aroclor 1260	ND	147	"	"	"	"	"	"	

Surr: 2,4,5,6-Tetrachloro-m-xylene 125 % 55-130

Surr: Decachlorobiphenyl 103 % 55-130

01AMLA04SL (M108006-06) Soil

Sampled: 08/03/01 Received: 08/03/01

Aroclor 1016	ND	144	ug/kg dry	1	EPA 8082	08/03/01	08/04/01	0108009	
Aroclor 1221	ND	288	"	"	"	"	"	"	
Aroclor 1232	ND	144	"	"	"	"	"	"	
Aroclor 1242	ND	144	"	"	"	"	"	"	
Aroclor 1248	ND	144	"	"	"	"	"	"	
Aroclor 1254	ND	144	"	"	"	"	"	"	
Aroclor 1260	ND	144	"	"	"	"	"	"	

Surr: 2,4,5,6-Tetrachloro-m-xylene 121 % 55-130

Surr: Decachlorobiphenyl 90.5 % 55-130

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

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Bristol Environmental & Engineering
2000 W International Airport C#1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
08/13/01 17:51

Polychlorinated Biphenyls per EPA Method 8082

North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMLA05SL (M108006-07) Soil					Sampled: 08/03/01 Received: 08/03/01				
Aroclor 1016	ND	146	ug/kg dry	1	EPA 8082	08/03/01	08/04/01	0108009	
Aroclor 1221	ND	292	"	"	"	"	"	"	
Aroclor 1232	ND	146	"	"	"	"	"	"	
Aroclor 1242	ND	146	"	"	"	"	"	"	
Aroclor 1248	ND	146	"	"	"	"	"	"	
Aroclor 1254	ND	146	"	"	"	"	"	"	
Aroclor 1260	ND	146	"	"	"	"	"	"	
Surr: 2,4,5,6-Tetrachloro-m-xylene	121 %	55-130							
Surr: Decachlorobiphenyl	96.5 %	55-130							

North Creek Analytical - Mobile Lab

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Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
08/13/01 17:51

Physical Parameters per APHA/ASTM/EPA Methods
North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMLA32SL (M108006-01) Soil					Sampled: 08/03/01 Received: 08/03/01				
% Solids	75.8	0.0100 % by Weight		1	Gravimetric	08/03/01	08/04/01	0108010	
01AMLA27SL (M108006-02) Soil					Sampled: 08/03/01 Received: 08/03/01				
% Solids	77.0	0.0100 % by Weight		1	Gravimetric	08/03/01	08/04/01	0108010	
01AMLA21SL (M108006-03) Soil					Sampled: 08/03/01 Received: 08/03/01				
% Solids	74.2	0.0100 % by Weight		1	Gravimetric	08/03/01	08/04/01	0108010	
01AMLA22SL (M108006-04) Soil					Sampled: 08/03/01 Received: 08/03/01				
% Solids	75.8	0.0100 % by Weight		1	Gravimetric	08/03/01	08/04/01	0108010	
01AMLA09SL (M108006-05) Soil					Sampled: 08/03/01 Received: 08/03/01				
% Solids	76.1	0.0100 % by Weight		1	Gravimetric	08/03/01	08/04/01	0108010	
01AMLA04SL (M108006-06) Soil					Sampled: 08/03/01 Received: 08/03/01				
% Solids	72.5	0.0100 % by Weight		1	Gravimetric	08/03/01	08/04/01	0108010	
01AMLA05SL (M108006-07) Soil					Sampled: 08/03/01 Received: 08/03/01				
% Solids	68.0	0.0100 % by Weight		1	Gravimetric	08/03/01	08/04/01	0108010	

North Creek Analytical - Mobile Lab

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Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
08/13/01 17:51

Polychlorinated Biphenyls per EPA Method 8082 - Quality Control

North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch 0108009 - 3545 ASE

Blank (0108009-BLK1)

Prepared & Analyzed: 08/03/01

Aroclor 1016	ND	150	ug/kg wet
Aroclor 1221	ND	301	"
Aroclor 1232	ND	150	"
Aroclor 1242	ND	150	"
Aroclor 1248	ND	150	"
Aroclor 1254	ND	150	"
Aroclor 1260	ND	150	"

<i>Surr: 2,4,5,6-Tetrachloro-m-xylene</i>	213	"	200	107	55-130
<i>Surr: Decachlorobiphenyl</i>	184	"	200	92.0	55-130

LCS (0108009-BS1)

Prepared & Analyzed: 08/03/01

Aroclor 1254	837	150 ug/kg wet	833	100	55-130
<i>Surr: 2,4,5,6-Tetrachloro-m-xylene</i>	220	"	200	110	55-130
<i>Surr: Decachlorobiphenyl</i>	186	"	200	93.0	55-130

Matrix Spike (0108009-MS1)

Source: M108005-01

Prepared: 08/03/01 Analyzed: 08/04/01

Aroclor 1254	1220	167	ug/kg dry	1270	ND	96.1	55-130
<i>Surr: 2,4,5,6-Tetrachloro-m-xylene</i>	318		"	305		104	55-130
<i>Surr: Decachlorobiphenyl</i>	247		"	305		81.0	55-130

Matrix Spike Dup (0108009-MSD1)

Source: M108005-01

Prepared: 08/03/01 Analyzed: 08/04/01

Q-01

Aroclor 1254	618	167	ug/kg dry	1270	ND	48.7	55-130	65.5	40
<i>Surr: 2,4,5,6-Tetrachloro-m-xylene</i>	163	"		305		53.4	55-130		
<i>Surr: Decachlorobiphenyl</i>	114	"		305		37.4	55-130		

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

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Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
08/13/01 17:51

Notes and Definitions

- Q-01 The spike recovery for this QC sample is outside of established control limits. Review of associated batch QC indicates the recovery for this analyte does not represent an out-of-control condition for the batch.
- S-07 Surrogate recovery is out of control limits. QA criteria are met when one surrogate is within control limits.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
- wet Sample results reported on a wet weight basis (as received)
- RPD Relative Percent Difference

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

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Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
			Report recreated from: \\sisters\elmnt\Report\M108006 FINAL 08 13 01 1751.mdb Default Report (not modified)
0108009-MSD1	8082 PCB		Q-01
0108009-MSD1	8082 PCB	Aroclor 1254	Exceeds RPD limit
0108009-MSD1	8082 PCB	Decachlorobiphenyl	Exceeds lower control limit
0108009-MSD1	8082 PCB	Aroclor 1254	Exceeds lower control limit
0108009-MSD1	8082 PCB	2,4,5,6-Tetrachloro-m-xylene	Exceeds lower control limit
M108006-01	8082 PCB	2,4,5,6-Tetrachloro-m-xylene	S-07
M108006-01	8082 PCB	2,4,5,6-Tetrachloro-m-xylene	Exceeds upper control limit
M108006-02	8082 PCB	2,4,5,6-Tetrachloro-m-xylene	S-07
M108006-02	8082 PCB	2,4,5,6-Tetrachloro-m-xylene	Exceeds upper control limit
M108006-03	8082 PCB	2,4,5,6-Tetrachloro-m-xylene	S-07
M108006-03	8082 PCB	2,4,5,6-Tetrachloro-m-xylene	Exceeds upper control limit